

### **DETAILED ACTION**

The amendment filed by Applicant on June 29, 2009 has been acknowledged. Applicant amended claims 1 and 4, cancelled claim 2 and added new claim 5. Claims 1 and 3-5 are currently pending for examination on the merits.

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims **1 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelley (US 2003/0167556 A1) in view of Hipskind et al. (US 5,792,760) and Buesselmann (US 6,500,197 B1).

Kelley discloses a method for determining the antioxidant levels of skin (see [0170]-[0171]). The method comprises the steps of 1) subjecting a patch of skin (i.e. face) with UVA radiation, 2) measuring the biophoton emission of the irradiated skin, and 3) comparing the measurement with a control value. The method disclosed by Kelley differs from the claimed invention in that Kelley does not disclose that the control value is derived from photon emission of the skin prior to the irradiation as well as photon emission of another region of skin that is not subjected to UVA radiation.

Buesselmann discloses a method of determining the effect of external influence on biophoton emission of organic tissue. To quantitatively measure the effect, a tissue sample is subjected to an external influence and the biophoton emission of the tissue is subsequently measured. The measurement is then compared to the biophoton emission of the same tissue prior to the application of the external influence (see lines 40-53, col.

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2). In light of the disclosure of Buesselmann, it would have been obvious to one of ordinary skill in the art to determine the control value in the method disclosed by Kelley based on the pre-UVA irradiation measurements that accounts for the effect of the external influence on a specific tissue sample.

Hipskind et al. disclose a method of determining the effect of an external influence on a tissue sample (see lines 10-27, col. 37). To quantitatively measure the effect, one region of the tissue sample is subjected to the external influence while another region remains unstimulated. Then, the measurement from the externally influenced tissue sample is compared to the measurement from the non-stimulated region. In light of the disclosure of Hipskind et al., it would have been obvious to one of ordinary skill in the art to determine the control value in the method disclosed by Kelley based on the measurement of a non-stimulated region of the skin sample that accounts for biophoton emission induced by a stimulus other than UVA radiation.

With respect to claim 2, Kelley discloses that the increase in biophoton emission induced by UVA radiation decays with time (see [0170]). Thus, it would have been obvious to one of ordinary skill in the art to measure biophoton emission immediately after subjecting the tissue sample to UVA radiation.

Claims **4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelley in view of Hipskind et al. and Buesselmann as applied to claims 1 and 3, and further in view of Wolff (US 4,194,125).

None of Kelley, Hipskind et al. and Buesselmann disclose the use of a filter.

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Wolff discloses a light source that emits only UVA radiation wherein the light source comprises a spectral filter for filtering wavelengths other than UVA radiation (see lines 35-45, col. 3). In light of the disclosure of Wolff, it would have been obvious to one of ordinary skill in the art to use a spectral filter in the light source disclosed by Kelley such that it emits only UVA radiation. Use of monochromatic light would ensure measurement accuracy by eliminating undesired sources of external influence.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but they are moot in view of the new grounds of rejection. The amendment necessitated new grounds of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL S. HYUN whose telephone number is (571)272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul S Hyun/  
Examiner, Art Unit 1797

/Jill Warden/  
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